(1) NO MECHANISM EXISTS FOR COMPARING CLEC AND BELLSOUTH EXPERIENCE WHEN PROVIDING RESALE SERVICES EVEN IF THE OSS ACCESS WERE OPERATIONALLY READY

Q. WHAT MUST BE DONE TO PERMIT STATISTICALLY VALID COMPARISONS OF PERFORMANCE?

A. As a first step, the measurement plan must gather and retain data in a manner that permits meaningful tests for statistically significant differences (CLEC vs BellSouth) in performance. Specifically, the number of observations must be known and both a performance means and the variances around the mean must be computed. Given the preceding, the results can be tested and a determination made, at generally acceptable and agreed upon levels of statistical significance, whether or not the CLEC results are no worse than that experienced by BellSouth's own retail local service operations or those of any of its affiliates.

Q. WHY IS IT IMPORTANT TO ACCOUNT FOR SERVICE MIX DIFFERENCES AS PART OF ASSESSING NONDISCRIMINATION?

A. It must be possible to group and compare performance measures along dimensions that reflect common attributes likely to be correlated with expected differences in performance. Basically, apples must be compared to apples. For example, installation intervals for complex business orders are likely to be substantially longer than the installation interval for single line residence basic local service. Therefore, a due date performance measure that combines the business and residence categories into a single reported result could be misleading.

Q. ARE MEASURES THAT REPORT CLEC PERFORMANCE, COMPARED TO A TARGET OR STANDARD LEVEL, ADEQUATE FOR PURPOSES OF ESTABLISHING NONDISCRIMINATION?

A. No. The comparison of CLEC performance to a target is not very useful for purposes of determining nondiscrimination, unless the target or the standard is actual performance experienced by BellSouth. Comparisons to a target level may be misleading, unless the entities being compared have identical, or at least very similar, deviations in their experiences.

Q. WHY DO YOU SAY THAT ACTIVITY MIX MUST BE ACCOUNTED FOR IN THE MEASUREMENT PLAN?

A. The activity mix consideration is similar, in many respects, to the service mix issue. Many types of activities may be involved within the process of successfully completing a single business task. As a simple example, service repair may in some cases involve a premises visit, while in other cases remotely managed restoration is possible. Whether or not a premises visit is required will impact upon the expected (and actual) restoration interval, regardless of the service being supported.

Two companies experiencing the same performance at an activity level may have very different average performances due to variations in the mix of key activities. For this reason, BellSouth should provide disaggregated performance measures when differences in the underlying mix of activities could reasonably be expected to influence the aggregate measures.

Q. DOES THE SAME PROBLEM OF USING MEASURES FOR SERVICE MIX ALSO APPLY TO THE ACTIVITY MIX?

A. Yes. Again, actual measures of the mean performance are preferable, combined with appropriate measure data that permits comparisons of performance.

Q. CAN COMPARISONS TO TARGET LEVELS OR TO PERFORMANCE STANDARDS BE UTILIZED AS AN INTERIM MECHANISM FOR MONITORING NONDISCRIMINATION?

A. Yes. At a minimum, the standards to which comparisons are made would need to be identical among CLECs and for BellSouth. Furthermore, the standard for comparison cannot be based upon one party's ability to negotiate a commitment. For example, the measure for due date performance, if other than the actual interval to deliver is measured, should be a comparison with a published standard interval for the service configuration (e.g., residence exchange service) and situation (no premise visit). The comparison should not be to the due date commitment that BellSouth is willing to provide and which may vary from order to order and CLEC to CLEC. Measures in comparison to commitment should rarely, if ever show misses, unless the initial commitment is valueless. However, the underlying actual performance (e.g., in terms of the actual service provisioning interval) could be significantly different.

(2) NO MECHANISM EXISTS FOR COMPARING CLEC AND BELLSOUTH EXPERIENCE WHEN USING OSS ACCESS FOR UNBUNDLED NETWORK ELEMENTS

Q. WHY DO YOU SAY THAT MEASURES MUST BE ESTABLISHED AT THE UNBUNDLED NETWORK ELEMENT LEVEL AS WELL AS AT THE SERVICE LEVEL?

A. As the FCC stated in its Order of August 8, 1996 (¶ 525) delivery of nondiscriminatory OSS access is a requirement not only for services resale but also for unbundled network elements. The FCC is looking to the state commissions to establish measurements which demonstrate that nondiscriminatory access is and continues to be delivered (¶ 311). Service level measures, if properly defined, may help detect discriminatory behavior relating to the support of services resale and, to a lesser extent, the use of unbundled network elements in combination. However, minimizing the possibility of discriminatory performance at the network element level requires focused measures. These measurements will typically be limited in scope and will not be service oriented but rather will be oriented to access delivered for specific unbundled network elements, such as access to OSS functionality.

Q. WHAT ARE THE BASIC CONSIDERATIONS THAT MUST BE TAKEN INTO ACCOUNT WITH RESPECT TO MONITORING ACCESS TO OSS FUNCTIONALITY?

A. Beyond gathering sufficiently discrete measures that are suitable for meaningful comparison as described above, the measures adopted must address interface availability, timeliness of execution, and accuracy of execution. Moreover, measurements must be established and tracked for each individual interface. It

makes no sense to construct a set of measures where good availability performance on the part of, for example, a billing interface could mask the very poor performance on the part of another interface, such as maintenance and repair.

At a minimum, this Commission should assure itself that BellSouth will provide separately reported comparative measures of timeliness, accuracy and availability for each key interface -- pre-ordering transactional interface, pre-ordering batch interface, ordering transactional interface, ordering batch interface, provisioning, maintenance and repair, usage billing information, services resale billing information, and UNE billing information.

Q. WHY DO YOU SAY NINE INTERFACES MUST BE MONITORED WHEN THERE ARE ONLY FIVE PROCESSES SUPPORTED?

A. There are two basic interfaces for the exchange of information. They are transactional interfaces and batch interfaces. Transactional interfaces accommodate the movement of information on a real-time or near real-time basis. Typically, the re-ordering interface for telephone number assignment would be transaction based so that the retail customers could be given a telephone number during ordering discussions with the CLEC. On the other hand, batch interfaces handle the exchange of massive amounts of data or the exchange of data where immediacy of receipt is not an issue. For example the exchange of recorded customer usage will typically occur over a batch interface. Because of the very different nature of these two types of interfaces, they should be separately monitored. Because some of the supported processes involve both batch and transactional interfaces, more than one interface for each process must be monitored.

Q. CAN YOU GIVE SOME EXAMPLES ILLUSTRATING WHAT MUST BE ADDRESSED WITH RESPECT TO THE INTERFACE AVAILABILITY MEASURE?

A. The interface availability measure needs to reflect how frequently OSS functionality is, from a practical standpoint, not accessible by CLECs. As part of the availability measure a differentiation of business hours (e.g., 8:00 AM to 5:00 PM) versus non-business hours performance must be made. For example, if the re-ordering interface is unavailable for three hours between 8:00 AM and 5:00 PM on a business day, much greater competitive market impact results (i.e., customer dissatisfaction) than if the same interface were to be unavailable for the same amount of time from 2:00 AM to 6:00 AM on a Sunday.

Q. CAN YOU PROVIDE ILLUSTRATIONS OF WHAT IS NECESSARY WITH RESPECT TO THE ACCURACY AND TIMELINESS MEASURES?

A. Both accuracy and timeliness must be measured for key transactions as opposed to only providing results for aggregations of transactions. By accuracy, I mean how frequently the request submitted to BellSouth returns without error. By timeliness, I mean that the time required to execute, from the time the CLEC initiates a transaction until the transaction is successfully processed by BellSouth. Each transactional measure should be specific to a single interface and tracked on an on-going basis.

The accuracy and timeliness of transactions is crucial to quality execution of the process supported by each interface. It is the successful execution -- in terms of both timeliness and accuracy -- of transactions that will permit

CLECs to provide customer servicing that is competitive with that of BellSouth. Varying types of transactions will occur with differing intensity of use and involve differing processing times. Therefore, monitoring measures that aggregate all transactions into a composite result would be virtually useless.

Q. WHAT DO YOU MEAN BY TRANSACTION LEVEL MEASURES OF QUALITY?

A. The transactional measures are specific to each interface. For example, the average time for a Firm Order Completion (FOC) is a transactional measure of timeliness for the provisioning interface. The reject rate for orders (850 EDI transaction) is a transactional level measure of accuracy, also for the ordering interface.

Q. COULD THE ACTUAL VALUES FOR PERFORMANCE MEASURES BE CONSIDERED PROPRIETARY?

A. Some may be. If the CLECs or BellSouth perceive that such information is proprietary, then an alternative means for reporting actual measures can be established. For example, the results for individual companies could be reported to an unaffiliated entity that is bound by appropriate non-disclosure agreements. That entity could review and analyze the data and provide report cards to the Commission and appropriate individual CLEC report cards. The report card could show, for each transactional measure, a simple indication whether, for example at a 95% level of confidence, the performance experienced by the CLEC is no worse than that experienced by BellSouth.

Assuming cooperation by industry participants, the analysis process does not seem overly complex. Because the information is critical to all parties, if cost recovery is an issue, then the costs of the "report card" should be recovered in a competitively neutral manner.

Naturally, the implementation details would need to be worked out. It seems reasonable to expect that a team of industry representatives could devise a mechanism for reporting performance and submit a plan for Commission approval in a relatively short time frame. Clarity and consensus regarding what is actually to be measured and reported would be required as an input.

Q. YOUR DISCUSSION HAS FOCUSED ONLY UPON THE PROPOSED OSS AND SERVICE LEVEL MEASURES. ARE THERE OTHER MEASURES THAT MUST BE ADDRESSED RELATING TO UNBUNDLED NETWORK ELEMENTS?

A. Yes. BellSouth is obligated to provide nondiscriminatory access to all unbundled network elements and to combinations of UNEs that CLECs request and that are technically feasible to provide. When the FCC looked to the state commission for input regarding measurements, there was no limitation for any form of access to unbundled network elements. Accordingly, BellSouth must have in place meaningful tracking that demonstrates nondiscriminatory access is indeed being delivered where UNEs are employed by a CLEC, whether used individually or in combination.

IV. SUMMARY

Q PLEASE SUMMARIZE YOUR TESTIMONY

A. Despite BellSouth's claims, the OSS access currently offered or promised to CLECs is insufficient to satisfy its obligations under the Act as interpreted by the FCC. BellSouth's OSS access cannot be deemed operationally ready. My testimony identifies shortfalls on each of five criteria for determining that OSS access is operationally ready. Any one of the defects, on its own, would be sufficient to find that the OSS access is not operational. As a result, BellSouth has clearly not met the requirements of Section 271 as it pertains to the Competitive Checklist. Furthermore, BellSouth has not offered any plan to collect and report the measures necessary to demonstrate that nondiscriminatory access is actually delivered by BellSouth's OSS access. The pivotal role to developing competition that is played by nondiscriminatory OSS access requires that appropriate measures to demonstrate nondiscrimination be in place.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes, it does.

STATE OF MICHIGAN
BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter, on the Commission's own motion, to consider Ameritech Michigan's compliance with the competitive checklist in Section 271 of the Telecommunications Act of 1996	)))))	- Case No. U-11104

AFFIDAVIT OF C. MICHAEL PFAU
ON BEHALF OF AT&T COMMUNICATIONS OF MICHIGAN, INC.

STATE OF ILLINOIS	)	
	)	ss.
COUNTY OF COOK	)	

I, C. Michael Pfau, being first duly sworn upon oath, do hereby depose and state as follows:

1. My name is C. Michael Pfau. My business address is 295 North Maple Avenue, Basking Ridge, New Jersey 07920.

2. I am employed by AT&T Corp., and I serve as Division Manager, Local Services Division Negotiations Support.

3. My responsibilities include helping to develop and communicate the business requirements to the regional teams negotiating with the Incumbent Local Exchange Carriers (ILECs). I also assist the regional teams in performing feasibility assessment of business arrangements offered by the ILECs.

4. I began my career in Bell of Pennsylvania, where I had various assignments in central office engineering, plant extension, circuit layout and regulatory operations. Just prior to divestiture, I moved to AT&T General Departments, where I was responsible for managing intrastate service cost models. My next assignment was in an AT&T regional organization responsible for regulatory implementation support of service and marketing plans within the five Ameritech states. I then moved to a headquarters position responsible for managing market research related to business communications services. Immediately prior to my current assignment, I worked within the product management organization, focusing upon private line data services.

5. I have a Bachelor of Science degree in Mechanical Engineering and a Masters Degree in Business Administration, both from Drexel University. In addition, I have a Professional Engineering License from the State of Pennsylvania.

SUBJECT OF STATEMENT

6. My testimony responds to Ameritech's claim that it will provide nondiscriminatory access to Ameritech's operations support systems (OSS), a subject addressed in the testimony of Ameritech witnesses Dunny, Mayer, Mickens and Rogers.

7. First, I will discuss the requirements for the efficient exchange of OSS information between Ameritech and competitors who resell Ameritech's local services or purchase unbundled network elements (UNEs). More specifically, I will discuss the requirements for the

electronic interfaces between AT&T and Ameritech's operations support systems that are necessary to permit effective competition to develop in the provision of local services.

8. I will then address how the interfaces proposed by Ameritech in this case for access to its operations support systems and databases do not meet those requirements because (1) CLECs cannot rely on Ameritech's interface specifications because they are still being revised, (2) several of the essential OSS interfaces which Ameritech claims to have deployed within the last month have never been used or tested by any CLEC, (3) testing of other OSS interfaces by AT&T has not produced satisfactory results, and (4) Ameritech has not demonstrated that its interfaces will provide parity of access to Ameritech's operations support systems.

9. Next, I will address certain deficiencies in the measurements proposed by Ameritech for determining whether Ameritech is actually providing nondiscriminatory access for resale services and for unbundled network elements.

OPERATIONS SUPPORT SYSTEMS

10. "Operations support systems" or "OSS" are the systems and databases that provide essential information and functionality required to perform the pre-ordering, ordering, provisioning, maintenance and repair, and billing functions for the sale or resale of telecommunications services.

11. "Pre-ordering" is the process of obtaining the necessary information to enable the carrier's customer service agent to place an order for telephone service. It encompasses

the interaction between the carrier and the customer from the point of initial contact up to the placement of an order for new service or modification of an existing service. Pre-ordering ordinarily takes place while the customer is "on the line." Pre-ordering includes a determination of the customer's existing service, a determination of the availability of new services and features that might meet the customer's needs, address verification, a determination of whether a site visit is required to establish or modify service, the scheduling of any appointment, the assignment of any new telephone numbers, and establishing a date for the commencement of service.

12. "Ordering" is the process of placing an order for telecommunications service. For purposes of this proceeding, ordering is the process by which AT&T places an order with Ameritech for the provision of either local service resale or unbundled network elements necessary for AT&T to deliver service to AT&T's local retail customers.

13. "Provisioning" is the process of implementing the order for telecommunications service, including initial order verification, firm order confirmation, the monitoring of service order status, and order completion. For purposes of this proceeding, provisioning is the process by which Ameritech implements an order from AT&T for a resold local service or unbundled network elements as part of AT&T's establishment of local retail service for its customers.

14. "Maintenance and repair" refer to the monitoring and fault management activities, including trouble reporting and the monitoring and correction of reported troubles, to assure proper functioning of local services.

15. In the case of local service resale and the purchase of unbundled network elements, "billing" refers to the processes by which Ameritech must record and transfer to AT&T the customer usage data and service element detail that AT&T needs to bill its retail customers for local service. Billing also includes, when AT&T uses a UNE local switching element to provide service, any information necessary to bill interconnecting carriers for either local exchange access services or other terminating local usage.

16. The establishment of efficient mechanisms and procedures for the exchange of information between the operations support systems of Ameritech and AT&T, or for that matter between Ameritech and other competitive local exchange carriers (CLECs), is absolutely essential for the development of meaningful competition in the provision of local services. When AT&T first enters local exchange service markets in Michigan on a large scale, its ability to provide local services to customers will be highly dependent upon its ability efficiently to obtain local services and unbundled network elements from Ameritech, which will depend in turn upon the efficient exchange of information between AT&T and Ameritech across all of the previously described OSS functions. Most of the necessary information for responding to initial service requests and for establishing, maintaining, and billing for service resides in the various operations support systems of Ameritech. Ameritech is thereby in a position to control the availability, accuracy and timeliness of information that is essential to AT&T's ability to compete.

NONDISCRIMINATORY ACCESS TO OPERATIONS SUPPORT SYSTEMS

17. In order to be an effective competitor in the provision of local services, AT&T must minimally be able to obtain the information in Ameritech's operations support systems with no less timeliness, accuracy, or ease of access than that experienced by Ameritech personnel. If, for example, a customer calling to inquire about obtaining service from AT&T cannot get timely answers to his/her questions because AT&T's customer service agent has difficulty obtaining accurate and timely information from Ameritech's operations support systems, then the customer will perceive AT&T's service as inferior, and there will be a very real risk the customer will not take service from AT&T, or will switch back from AT&T to Ameritech.

18. The FCC recognized the importance of nondiscriminatory access to operations support systems for the development of competition in its First Report and Order in Docket No. 96-98 where the Commission stated that:

> "[I]f competing carriers are unable to perform the functions of pre-ordering, ordering, provisioning, maintenance and repair, and billing for network elements and resale services in substantially the same time and manner that an incumbent can for itself, competing carriers will be severely disadvantaged, if not precluded altogether, from fairly competing. Thus providing nondiscriminatory access to these support systems functions, which would include access to the information such systems contain, is vital to creating opportunities for meaningful competition."[1]

I strongly agree with those statements.

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[1] First Report and Order, Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, CC Docket No. 96-98 (released August 8, 1996), at ¶ 518.

19. In its August 8, 1996 order, the FCC ordered that "an incumbent LEC must provide nondiscriminatory access to their operations support systems functions for pre-ordering, ordering, provisioning, maintenance and repair, and billing" that is comparable to the access that is available to the LEC itself. (¶ 523)

20. In order to establish parity of access, Ameritech must demonstrate that its OSS interfaces provide (1) equivalence of information availability, (2) equivalence of information accuracy, and (3) equivalence of information timeliness. Ameritech apparently agrees with the critical nature of these tests as demonstrated by their proposal to measure exactly these parameters as part of showing their OSS access is nondiscriminatory (Mickens, Illinois Testimony, p.41). Beyond demonstrating attainment of these three conditions, Ameritech's OSS interface must be shown to be equally capable of supporting service delivered either through the resale of local services or through the use of unbundled network elements. Moreover each interface must demonstrate the ability to handle the transactional load reasonably expected to occur as the competitive marketplace develops.

21. Equivalent information availability means that Ameritech must deliver to the CLEC, to no lesser a degree than it does for its own employees all data necessary to support a specific transaction and the delivered data must be in useable formats and unambiguous to the recipient and not entail human intervention in order to acquire the data. The extent of human interaction is a genuine concern in that it raises the possibility of error interjection and slower

processing. Ameritech has stated that many of its processes are likely to involve extensive human intervention (Rogers, Response To AT&T Data Requests 2.32 and 2.33 In Illinois)

22. Equivalent information accuracy requires that the information exchange mechanism pass three related tests: First, the information exchanged must comply with an agreed upon data format and structure. Second, the exchanges must implement agreed upon business rules for interaction. Third, demonstrated end-to-end transaction integrity must exist. AT&T's experience is that Ameritech has focused exclusively upon the first aspect to the detriment of the later two.

23. Interfacing software must be prepared to receive, disassemble, transform and forward data to supporting business processes and systems. If the format and/or structure of the data do not match that for which the system was designed, the wrong activity might occur, or the intended processes may fail altogether. To avoid these problems, data format and structure must be agreed upon for all elements and properly implemented. National standards provide value in reducing costs and providing guidance in this area. Ameritech, however, has unilaterally elected to create its own interface specifications, which have been revised multiple times in the relatively short time that they have been available.

24. Establishing how information will be exchanged, in the context of business activities, is equally as important as specifying the format and structure of the data elements. Both parties using an interface must understand how data will be "packaged" within messages that will cross the interface, the identity of the data elements that will and will not be provided, the sequence of messages that will be exchanged, and the business activities that will occur in response to the agreed upon message sets. The process of achieving this understanding is referred to as establishing "business rules." Without these business rules, chaos will reign at the interface because the ILEC and CLEC will not be able to communicate with each other or actions, expected as the result of the information exchange, will be unclear. Reading of the specifications delivered by Ameritech will not provide insight to governing business rules as Ameritech has already stated (Mickens, Response to AT&T Data Request 2.39 in Illinois). Rather AT&T must rely upon Ameritech to disclose these business rules or must deduce them through trial and error during intersystem testing. AT&T is currently engaged in this testing for a subset of Ameritech's interfaces.

25. The integrity of each end-to-end transaction must be assured as the information flows through all supporting systems that must process the information. This flow must be tested through all stages, including the initiation of the transaction, movement of the data elements through the CLEC operations support systems, transmission of the information across the interface, processing of the data within Ameritech's operations support systems, and subsequent return of data to the CLEC if appropriate. The users of the interface must have confidence that the

information flow is predictable and subject to replication. AT&T has not completed this testing. Likewise, it is reasonable to conclude that no other CLEC has completed such testing because Ameritech's has indicated no CLECs are using the services resale interfaces (Rogers Illinois Testimony, pp. 10, 11, and 15) and the same is true for UNE support interfaces, with the exception of ordering unbundled loops (id., p.9). In fact, not even Ameritech uses these interfaces for its own local service operations (Rogers, Response to AT&T Data Request 2.40 in Illinois).

26. Assurance of end-to-end integrity typically entails the sending of comprehensive sets of test cases all the way through both parties' processes to validate that the expected exchange of information and business activity occurs. Load carrying capacity must also be established as part of assuring the end-to-end integrity of the interface. An interface that operates satisfactorily at low volume but "chokes" the flow of essential servicing information at market volumes will place the new entrants at a competitive advantage.

27. This testing process can be time consuming and tedious, but it is absolutely essential to enable quality customer servicing and to assure nondiscriminatory access. Ameritech simply claims that the performance will be nondiscriminatory "because the systems utilize the same underlying systems and data utilized by Ameritech" (Rogers, Response to AT&T Data Request 2.44 in Illinois) while totally discounting the fact that the queries submitted by the CLECs will not be handled in the same manner as are those submitted by Ameritech own personnel (Mickens, Response to AT&T Data Request 2.45b in Illinois).

28. Equivalent information timeliness requires two things. First, the elapsed time for a transaction, starting when an information request transaction is initiated until the time the agreed upon result is returned, is equivalent whether a CLEC or an Ameritech customer service agent is involved. If the CLEC customer service agent requests a telephone number from Ameritech, for example, the response time should be equivalent to that experienced by an Ameritech customer service agent making an equivalent request. Because Ameritech does not utilize these interfaces in support of its own local service operations, it is not clear how a CLEC could ever determine whether or not nondiscriminatory access is delivered by Ameritech.

29. Second, the information supplied to the CLEC must be of the same "vintage" or time of production that is available to Ameritech personnel. For example, if feature and service availability data is updated monthly for Ameritech personnel, then the CLECs should receive updates at the same time. Ameritech has yet to address even how performance for batch interfaces, where such periodic updates are delivered, will even be measured (Mickens, Response to AT&T Data Request 2.46e in Illinois).

30. Because each company likely will employ differing approaches to customer servicing, the sole use of traditional service performance measures directed at the end-customer experience is likely to be inadequate for assessing information interface performance. A new measurement will probably be required. Such a monitoring measure should be based on joint agreement, and may require Commission oversight to develop.

31. One possible approach for transaction-based interfaces would be to establish standards for round-trip elapsed time for messages sent across the CLEC-Ameritech interface. CLECs need the ability to monitor their own experience and determine whether or not equivalent timeliness exists with respect to what Ameritech provides to itself.

32. In the case of batch interfaces -- those where large quantities of data are accumulated and delivered as files -- the timeliness standard applied can be the identical frequency of update as is provided to Ameritech personnel. If the CLEC desires less frequent feeds, the CLEC should also have that option.

THE OSS INTERFACES PROPOSED BY AMERITECH

33. The OSS interfaces proposed by Ameritech do not meet these tests for parity of access. In the first place, the interfaces to several of Ameritech's essential pre-ordering operating support systems were still not deployed in the field or available to CLECs as of mid-December 1996. Even assuming that those interfaces have now been deployed, those interfaces have never been used or tested by any CLEC.

34. Second, the specifications for several of Ameritech's proposed OSS interfaces have been frequently revised and are still being revised or clarified by Ameritech, so that CLECs are not yet in a position to design their systems to interact with Ameritech's systems so as to enable the CLECs like AT&T to enter the local market on a large scale.

35. Third, because of these and other problems, neither Ameritech nor AT&T can determine at this time from actual use whether the access delivered by Ameritech's OSS

interfaces will be adequate and nondiscriminatory. Nondiscriminatory access is not established by declaration. It can only be established by demonstration. Moreover, in the limited cases where an interface has been tested by AT&T, the Ameritech interface has fallen far short of meeting the nondiscriminatory access tests that I have discussed.

36. Furthermore, the interfaces that Ameritech has delivered for testing have addressed predominantly total service resale. No mechanized interfaces have been made available for testing by AT&T that address service delivery through the UNE platform (a combination of the local loop element, the local switching element, and the common transport element that was requested by AT&T). Interfaces must be made available that will handle services resale, UNEs and combinations of UNEs.

37. The testimony submitted by Ameritech in this case is also not clear as to whether all of the OSS interfaces proposed by Ameritech are presently available to CLECs. In supplemental rebuttal testimony filed in Illinois on Friday, December 13, 1996, and submitted in this case on Monday, December 16, 1996, Ameritech's witness Mr. Rogers states that Ameritech's proposed interfaces for a number of pre-ordering functions, including access to customer service records, access to telephone number selection and assignment, due date selection and access to information regarding changes in service order status, are still "under development" and are only "scheduled for commercial deployment" in December 1996 (Rogers Illinois Testimony, pp. 5, 15, 26). Mr. Rogers also states that the interfaces required for the provisioning of resold service is still not complete (id. at 11).

38. Similarly, the affidavit of Ameritech's Mr. Dunny, submitted in this case on December 16, 1996, states that Ameritech's interfaces for the pre-ordering, ordering and provisioning functions "are currently being upgraded" and "will be made available . . . on or before January 1, 1997" (Dunny Aff., pp. 31-32).

39. The affidavit of Mr. Mickens, on the other hand, also filed by Ameritech on December 16, 1996, states that all of these OSS interfaces are currently deployed by Ameritech (Mickens Aff., pp. 16-17, 19-20).

40. Even assuming that these operations support systems interfaces have now been deployed by Ameritech, however, that does not mean that those interfaces are operational. For something to be operational, it must be capable of being used. Despite the claims that its interfaces are presently deployed, Ameritech does not contend that any CLEC has ever used its pre-ordering, ordering or maintenance interfaces for transacting business (see Rogers Illinois Testimony, p. 15).

41. Even if Ameritech has successfully deployed interfaces for access to these operations support systems, their operability, and particularly their ability to operate in a nondiscriminatory manner, has plainly not been demonstrated.

42. Moreover, for the reasons I will describe later, Ameritech does not have a measurement plan adequate to demonstrate the delivery of nondiscriminatory access to its operations support systems, and there is certainly no evidence that the OSS access promised by Ameritech will in fact be nondiscriminatory in the marketplace.

43. Nor is the lack of a sufficient measurement plan the only reason that I conclude that Ameritech's operational support systems access is not fully operational. Although Ameritech states that its interfaces are, or will be, operational, and many of its interfaces may be technically capable of transmitting and receiving bits and bytes in a particular format and syntax, I am not at all confident that nondiscriminatory access to OSS functionality will exist, or that CLECs will be able to fully utilize such functionality. AT&T is the only CLEC Ameritech identifies as having engaged in any form of testing of the operational support systems access (Rogers Illinois Testimony, p. 15), and the experience of AT&T certainly cannot be relied upon as a successful demonstration that nondiscriminatory access to OSS functionality is a reality today (see id. at 16-23 and Schedule 1).

44. In order to be truly available in any meaningful sense, an interface must be thoroughly tested and demonstrated to operate as intended under the conditions and volumes that are reasonably expected actually to occur in the marketplace. Thus Ameritech should be required to show not only that its proposed interfaces are deployed in the field, but that they have been shown to operate successfully with the electronic interfaces of other service providers at volumes of traffic that are reasonably anticipated to occur. Until that field testing has been done and operational experience gained, it is impossible to conclude that Ameritech has met its obligation to provide parity of access to its operations support systems.